IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

JUL 3 1 2000 Appellant:

Canova, Jr.

itle

HANDHELD

COMPUTER WITH POP-UP USER INTERFACE

Appl. No.:

10/054,684

Filing Date:

1/22/2002

Examiner:

Tom V. Sheng

Art Unit:

2673

Confirmation No.:

5151

REPLY BRIEF

Mail Stop **APPEAL BRIEF - PATENTS** P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Under the provisions of 37 C.F.R. § 41.41, this Reply Brief is being filed in response to the Examiner's Answer dated May 31, 2006. The Appeal Brief was filed January 23, 2006, in response to a Final Action dated July 26, 2005.

CERTIFICATE OF EXPRESS MAILING
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Roberta A. Cooper

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REMARKS

With respect to independent claims 1 and 8, the Examiner's Answer included the following responses to Appellant's arguments in the Appeal Brief.

Consider Appellant's argument with respect to claims 1-17 (see pages 8-16 of Appeal Brief). The Applicant argues that no suggestion or motivation based on "an intuitive and ergonomic switching function" exi[s]ts in the cited combination of Henry and Cooper (and Danielson) to modify or combine the teachings of these references. The Examiner disagrees. Even though there is no explicit motivation from the references for the combination, one of ordinary skill in the art, based on the teachings from these analogous areas, can indeed reasonably combine the teachings. Specifically, the teaching of a deformable wall and corresponding depressible switch in an electronic mouse alone is sufficient for one to incorporate into other portable electronic devices, such as Henry's portable computing device. Moreover, Danielson's teaching of a toggling switch is sufficient for one to alternatively use a toggle switch in a portable electronic device, such as Henry's.

Appellant respectfully disagrees, and submits that the Examiner still has not established any motivation or suggestion to combine the cited references to arrive at the subject matter recited in claims 1 and 8. Henry, Jr. is directed to a "portable computing device" having text entry and character selection features. Col. 4, lines 34-61. As noted by the Examiner in the Final Action dated 7/26/05, "Henry does not teach that the switch is a pressure sensitive switch, the housing having a deformable side, the housing being sized to be held in one hand, the pressure sensitive switch coupled to the deformable side of the housing such that when the housing is squeezed by one hand, the deformable side is deformed and the switch is toggled." Final Action at page 3. The Examiner asserts in the Examiner's Answer that "the teaching of a deformable wall and corresponding depressible switch in an electronic mouse alone is sufficient for one to incorporate into other portable electronic devices, such as Henry's portable computing device." However, the Examiner's prior characterization of Cooper acknowledges that Cooper discloses a mouse, where squeezing and unsqueezing of the mouse correspond to "open and closed state[s], which is not the same as toggling." Final Action at page 3 (emphasis added). Accordingly, Appellant submits that the Examiner has not provided proper support, in either the cited references of Henry Jr. and Cooper, or in knowledge generally available to those skilled in the art, for the above-cited assertion that

"the teaching of a deformable wall and corresponding depressible switch in an electronic mouse alone is sufficient for one to incorporate into other portable electronic devices, such as Henry's portable computing device."

With respect to <u>Danielson et al.</u>, the Examiner's Answer seems to imply that there is no difference between a toggle switch (as taught, e.g., by <u>Cooper</u>) and a non-toggle switch (as taught, e.g., by <u>Danielson et al.</u>): "Danielson's teaching of a toggling switch is sufficient for one to alternatively use a toggle switch in a portable electronic device, such as Henry's." However, such reasoning improperly vitiates Appellant's recitation that the "switch" or "means for activating and deactivating" is "toggled," and further improperly relies on the Appellant's own disclosure for providing the motivation to combine the cited references. The Examiner's reliance on <u>Danielson et al.</u> amounts only to a general assertion that there are many types of switch variations without any recitation as to why one of ordinary skill in the art would be motivated to modify the switches 21 and 22 disclosed in <u>Cooper</u> to work as a toggle switch in combination with the handheld computer of <u>Henry, Jr.</u> The Examiner has provided no additional support for the assertion that there exists a motivation or suggestion to modify the portable device of <u>Henry Jr.</u> with the combined teachings of <u>Cooper</u> and <u>Danielson et al.</u> to arrive at the claimed subject matter of independent claims 1 and 8, and Appellant therefore submits that the proposed combination is improper.

The Examiner's Answer further stated the following with respect to independent claims 1 and 8.

The Applicant also argues that the rejections of claim 1 and 8 are improper because to modify the switches disclosed in Cooper to work as a toggle switch would change the principle operation [of] Cooper. The Examiner disagrees. The rejections are based on incorporating the toggle switch of Danielson in the portable computing device of Henry as modified by Cooper. In that case, there is no conflict in principle of operation since text entry activation by means of either a regular press switch or a toggle press switch would be equally acceptable to most users.

Appellant disagrees with the Examiner's above assertion that "there is no conflict in principle of operation since text entry activation by means of either a regular press switch or a toggle press switch would be equally acceptable to most users." Appellant submits that the

Examiner has not properly considered the fact that <u>Cooper</u> teaches away from the claimed invention. Viewed as a whole, <u>Cooper</u> teaches that "[u]sing the mouse with the above described program, an operator has a perception like that of moving his hand to a form shown on the screen, grasping it, moving it, and then releasing it in a new position," and that "[t]his perception makes the manipulation of the mouse control very easy to learn and remember, and gives a sense of satisfaction in performing the operation." Col. 2, lines 61-67. Thus, <u>Cooper</u> strongly suggests the desirability of a system that utilizes the grasping/moving/releasing features disclosed by <u>Cooper</u>, which would not be feasible with the toggle features of the claimed invention.

The Examiner's Answer further stated the following with respect to independent claims 1 and 8.

The Applicant further argues that the feature of toggling function of the pressure sensitive switch coupled to a deformable side is against conventional wisdom (thus novel). The Examiner disagrees. In fact, the Applicant teaches (see Specification, page 8, paragraph 27 or lines 20-26) that the switch 119 (fig. 3) for activating and deactivating a text entry area can be a pressure activated switch or sensor, a push button, a mechanical switch, a sliding switch, a space bar type switch, a capacitive sensor, or other manipulatable device. In other words, the Applicant has regarding the above mechanisms as equivalent, with no one having a particular advantage over the others.

Even though not the same concept, Cooper teaches the idea of having of two functions accessible with the same switch (see abstract), which is similar to a toggle switch. The Danielson reference was cited as it shows that toggle switch is commonly used in the field of input device.

Appellant submits that in asserting that Appellant's specification mentions alternative types of switches, the Examiner has not addressed the fact that viewed as a whole, the cited references suggest providing a separate mouse or other interface device separate from a computer. Appellant has conceived of including the toggling function of a pressure sensitive switch coupled to a deformable side in a single handheld device. Contrary to conventional wisdom, Appellant has taken the handheld computer itself and integrated user interface toggle switches and a deformable side into it as opposed to putting such features on a separate user interface. This design makes the handheld computer housing part of the interface, and is a

very different concept from having the user interface as a separate device. Appellant submits that the Examiner has improperly relied on Appellants own disclosure as the motivation to combine the cited references in attempting to arrive at the claimed subject matter.

Further, Appellant disagrees with the Examiner's characterization of Appellant's specification at page 8, ¶ 0027, that "the Applicant has regard[ed] the above mechanisms as equivalent, with no one having a particular advantage over the other." In reciting various types of switches that may be used in conjunction with the invention, Appellant has not suggested that one or more of these switches are equivalent, or that "no one [has] a particular advantage over the other" as suggested by the Examiner. In fact, Appellant's disclosure at ¶ 0029 states "[t]he toggle mode is particularly advantageous for users who only have one hand free, are disabled, or otherwise cannot engage switch 119 while entering data into writing section 118." Thus, Appellant submits that the Examiner has improperly mischaracterized Appellant's disclosure in treating different switch types as equivalents.

With respect to independent claim 18, the Examiner's Answer included the following responses to Appellant's arguments in the Appeal Brief.

Consider Appellant's argument with respect to claims 18-22 (see pages 16-19 of Appeal Brief). The Applicant argues that no suggestion or motivation based on "an intuitive and ergonomic switching function" exi[s]ts in the cited combination of Henry and Cooper to modify or combine the teachings of these references. The Examiner disagrees. Even though there is no explicit motivation from the references for the combination, one of ordinary skill in the art, based on the teachings from these analogous areas, can indeed reasonably combine the teachings. Specifically, the teaching of a deformable wall and corresponding depressible switch in an electronic mouse alone is sufficient for one to incorporate into other portable electronic devices, such as Henry's portable computing device.

Appellant submits that the Examiner has still not properly established a prima facie case of obviousness because the combination of <u>Henry Jr.</u> and <u>Cooper</u>, even if proper, fails to teach or suggest at least one limitation of independent claim 18. Claim 18 recites a combination including, among other elements, "wherein the deformable side is opposite a non-deformable side of the handheld computer." Appellant has not found any portions of <u>Henry Jr.</u> or <u>Cooper</u>, cited by the Examiner or otherwise, that teach or suggest this limitation.

In the portion of the Examiner's Answer regarding claims 1 and 8, the Examiner acknowledged that "Henry does not teach . . . the housing having a deformable side." As to Cooper, it teaches the use of two opposite and flexible wall portions to activate a single composite switch. In other words, Cooper at most teaches a deformable side opposite another deformable side. Accordingly, Appellant submits that no proper combination of Henry Jr. and Cooper teaches or suggests "wherein the deformable side is opposite a non-deformable side of the handheld computer," as recited in claim 18.

The Examiner's Answer further stated the following with respect to independent claim 18.

The Applicant also argues that the feature of a pressure sensitive switch coupled to deformable side is against conventional wisdom (thus novel). The Examiner disagrees. In fact, the Applicant teaches (see Specification, page 8, paragraph 27 or lines 20-26) that the switch 119 (fig. 3) for activating and deactivating a text entry area can be a pressure activated switch or sensor, a push button, a mechanical switch, a sliding switch, a space bar type switch, a capacitive sensor, or other manipulatable device. In other words, the Applicant has regarding the above mechanisms as equivalent, with no one having a particular advantage over the others.

As stated above with respect to claims 1 and 8, Appellant submits that in asserting that Appellant's specification mentions alternative types of switches, the Examiner has not addressed the fact that viewed as a whole, the cited references suggest providing a separate mouse or other interface device separate from a computer. In attempting to combine the cited references to arrive at the claimed subject matter, the Examiner has improperly relied on Appellant's own disclosure as a roadmap. Appellant has conceived of integrating the toggling function of a pressure sensitive switch coupled to a deformable side into a single handheld device. Contrary to conventional wisdom, Appellant has taken the handheld computer itself and included user interface toggle switches and a deformable side in it as opposed to putting such features on a separate user interface. This design makes the handheld computer housing part of the interface, and is a very different concept from having the user interface as a separate device.

CONCLUSION

In view of the foregoing, as well as in view of the Argument set forth in Appellant's Appeal Brief, Appellant respectfully requests that the Board reverse all claim rejections and indicate that a notice of allowance respecting all pending claims should be issued.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 06-1447.

Should no proper payment be enclosed herewith, as by a credit card payment form being unsigned, providing incorrect information resulting in a rejected credit card transaction, or even entirely missing, the Commissioner is hereby authorized to charge the unpaid amount to Deposit Account No. 06-1447.

Respectfully submitted,

Date 7/31/2006

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> Roberta A. Cooper (Printed Name)

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Sir:

Transmitted herewith are the following documents for the above-identified application.

Reply Brief (7 pages). [X]

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